

# **Digitization Project for The Center for Research on Concepts and Cognition**

**Prepared by: Wen Nie Ng**

This video digitization project is initiated by Jian Liu while managed by Wen Nie Ng to provide public access to Douglas Hofstadter's series of five public symposia on [IUScholarWorks](#). This document contains the digitization process, metadata scheme, and technical details of this project for future reference. I owe thanks to [Kara Alexander](#), [Jon Cameron](#), [Richard Higgins](#), and [Jian Liu](#) for guidance and assistance provided.

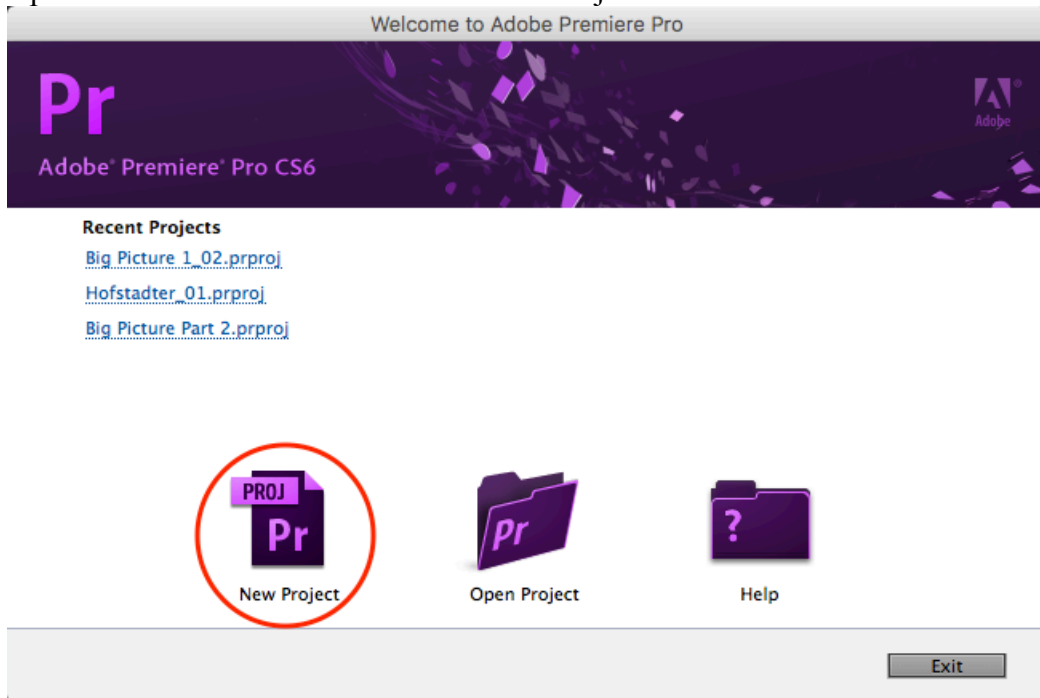
If you need further clarification on this document, please do not hesitate to email Wen at [ngwenniel@gmail.com](mailto:ngwenniel@gmail.com)

In this document:

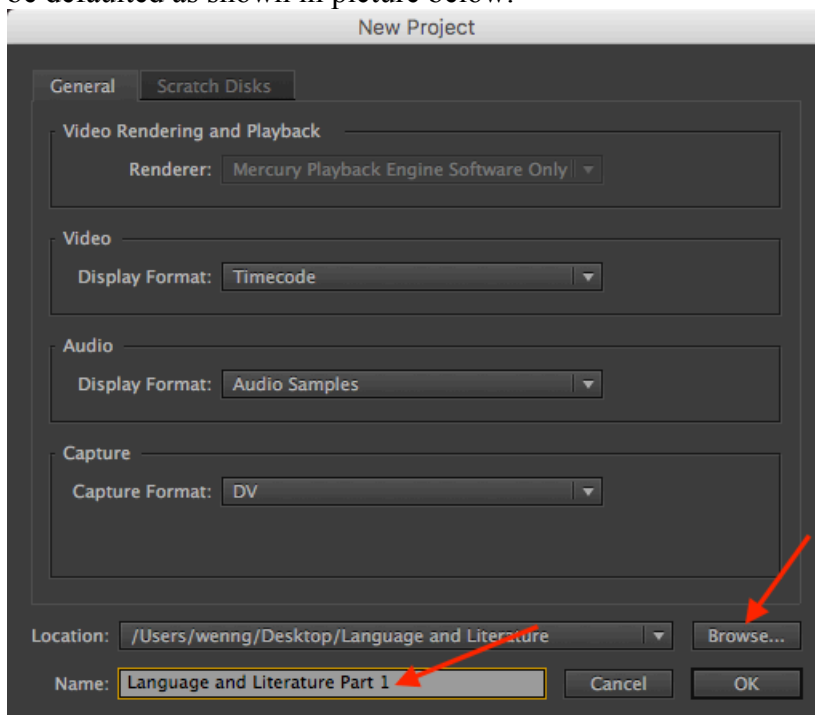
- I. Digitization manual
  - Digitizing VHS to digital format
  - Exporting media
  - Conversion of VHS to DVD
- II. Technical Details
- III. Hofstadter's Collection Metadata Application Profile
  - Data Input for each of video elements used on IUScholarWorks
    - a. id
    - b. collection
    - c. dc:title
    - d. dc.contributor.author
    - e. dc.publisher
    - f. dc.subject.lcsh
    - g. dc.description
    - h. dc.language.iso
    - i. dc.type
- IV. References

## Digitizing VHS to digital format

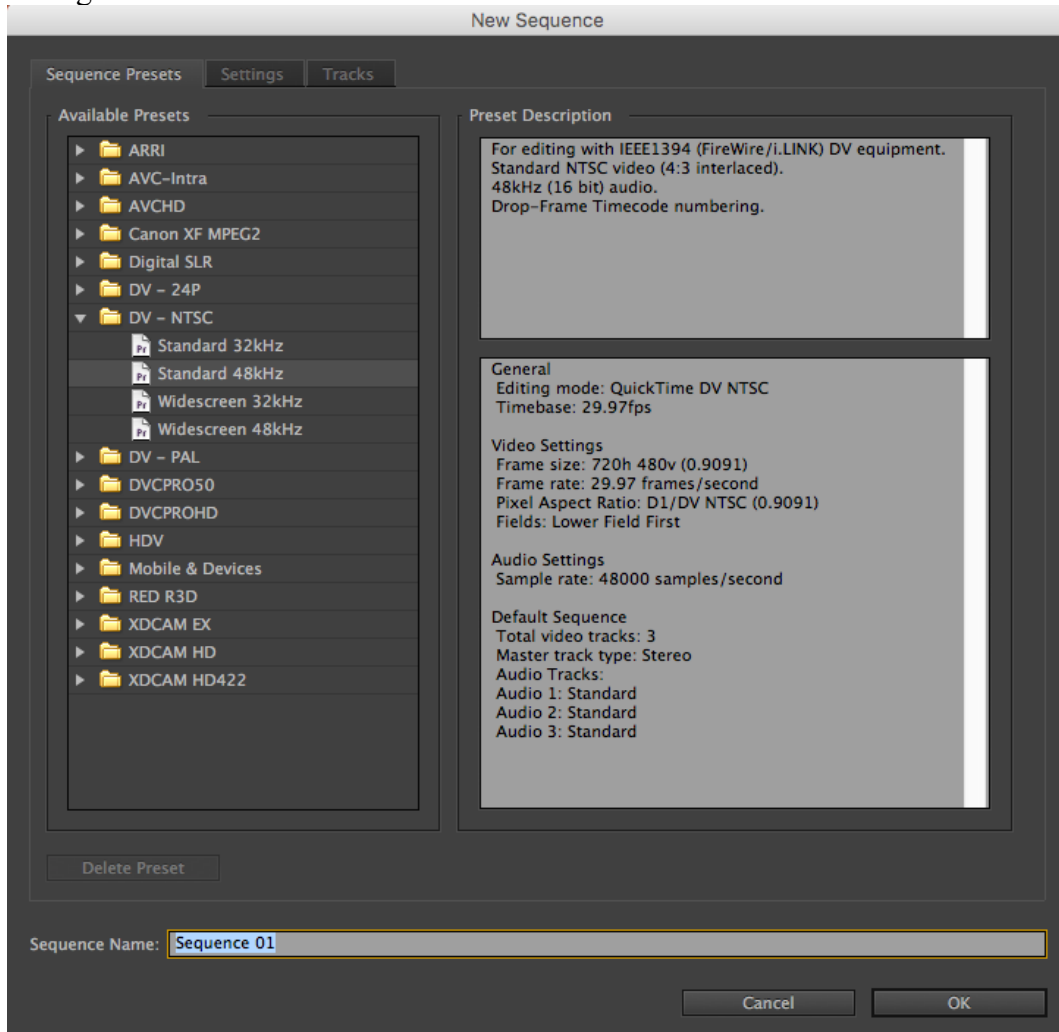
1. Open Adobe Premiere and start with New Project



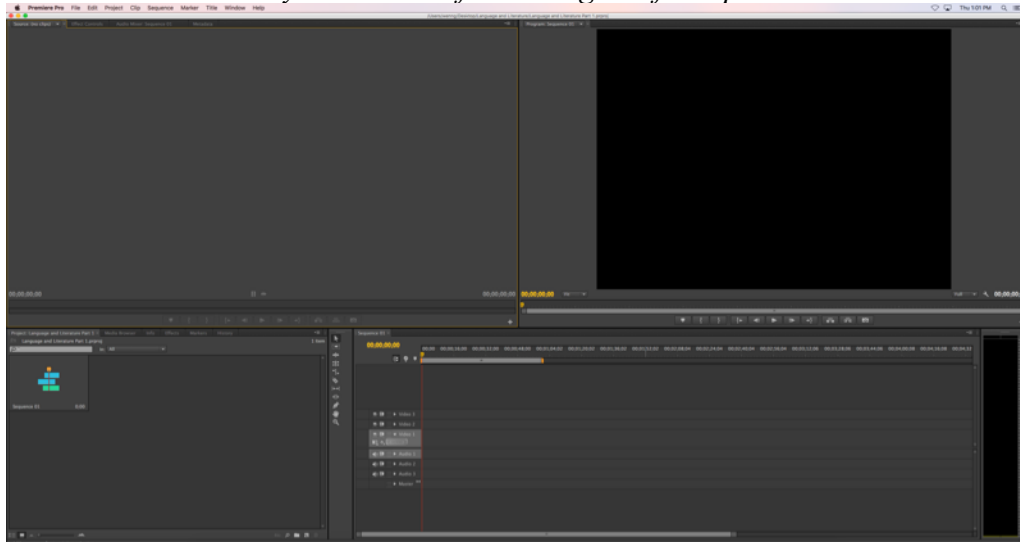
2. Name the project and browse to save the project at preferable location. All the other settings will be defaulted as shown in picture below.



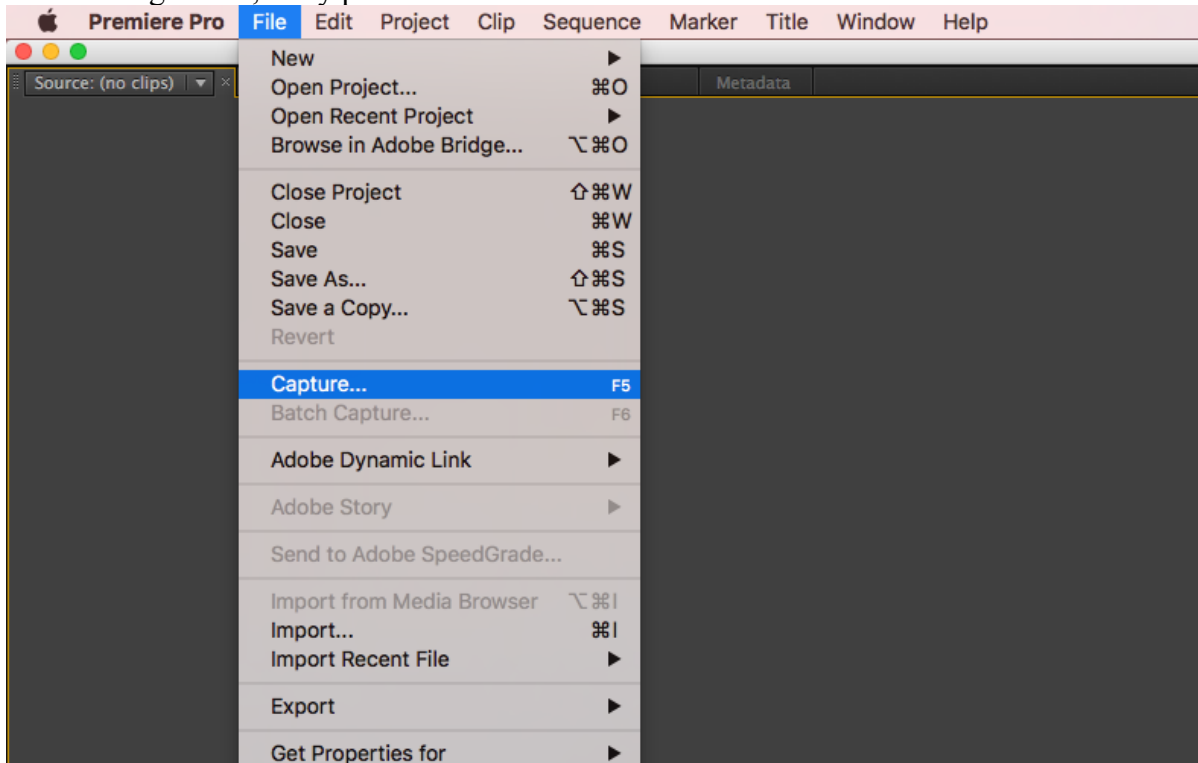
3. You will see the following screen for Sequence presets. Click OK to continue with default settings.



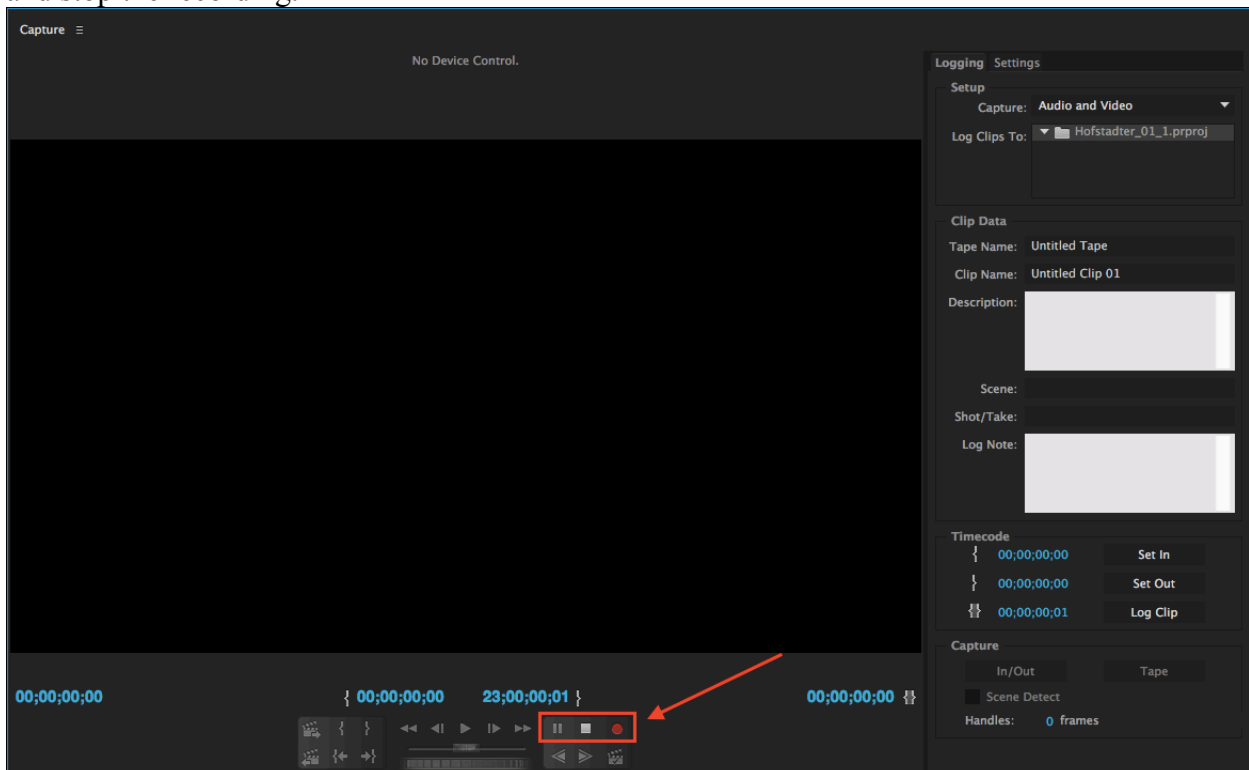
*Screen below is what you will see after hitting OK from previous screen.*



4. File → Capture. Same VHS/DVD model machine is recommended for capturing video from the same analog media; Sony produces dimmer video than Toshiba.

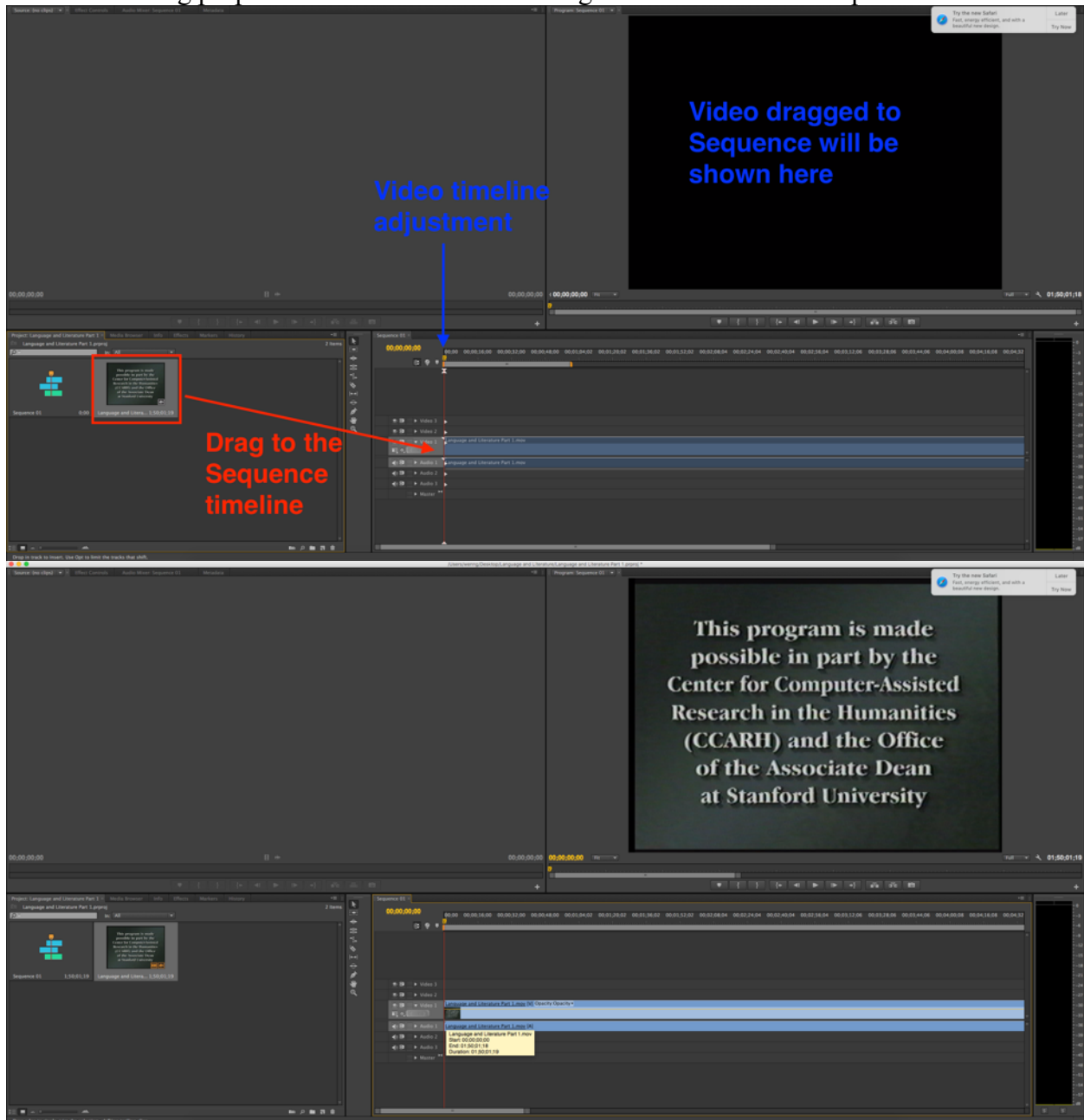


5. Once the mini-window comes up with the DVD playing, hit on the control keys for recording and stop the recording.

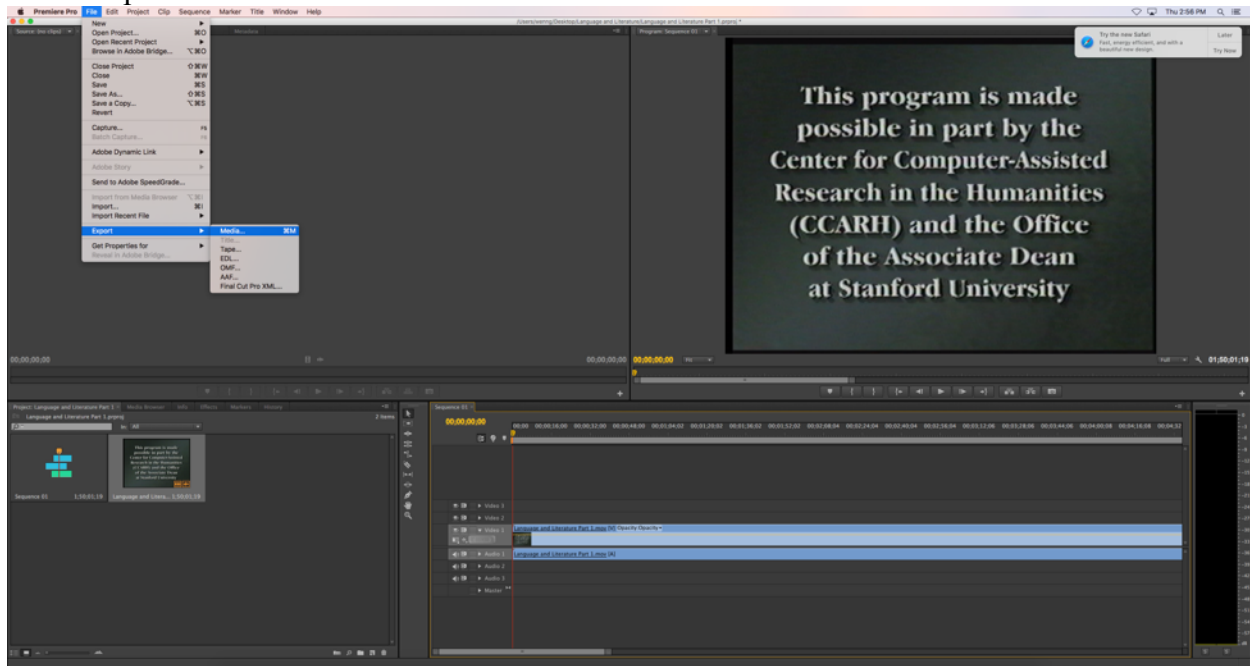


## Exporting media

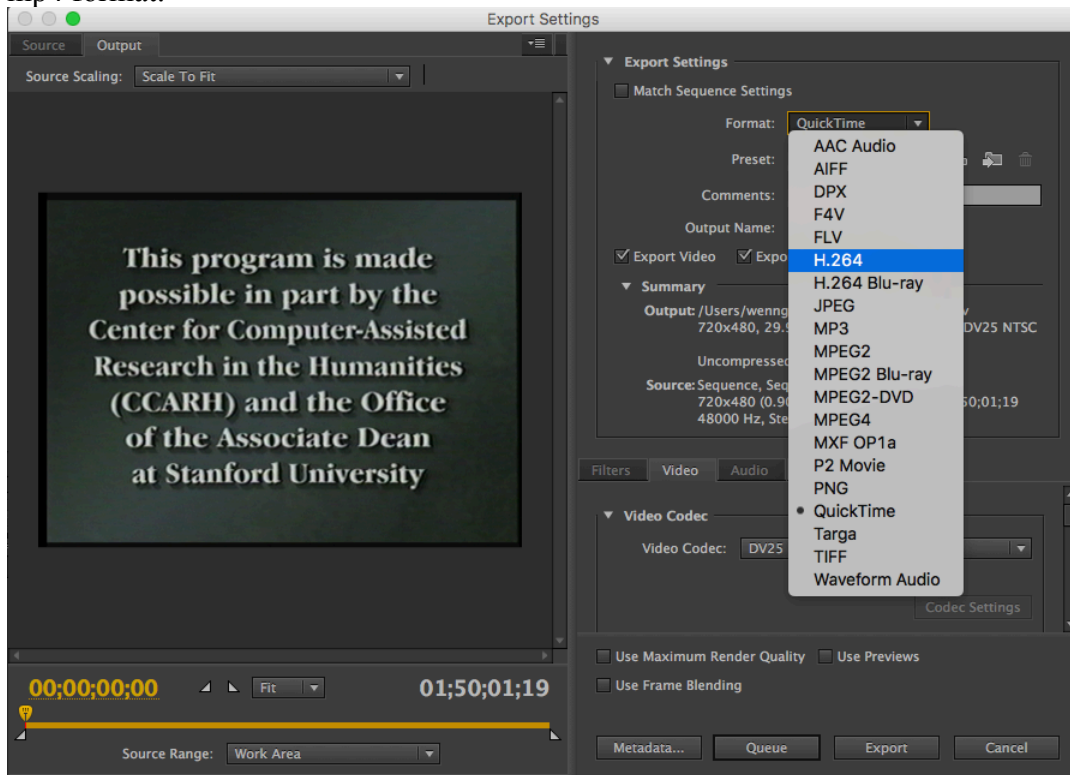
- When recording stops, close the capture window and you will see the following screen. Video captured by Premiere is saved in .mov format (large size master file for long term archiving and preservation purposes). The following steps will produce a derivative file (mp4 format) for online streaming purposes from the master file. Drag the .mov file to the Sequence timeline.



## 7. File→Export→Media

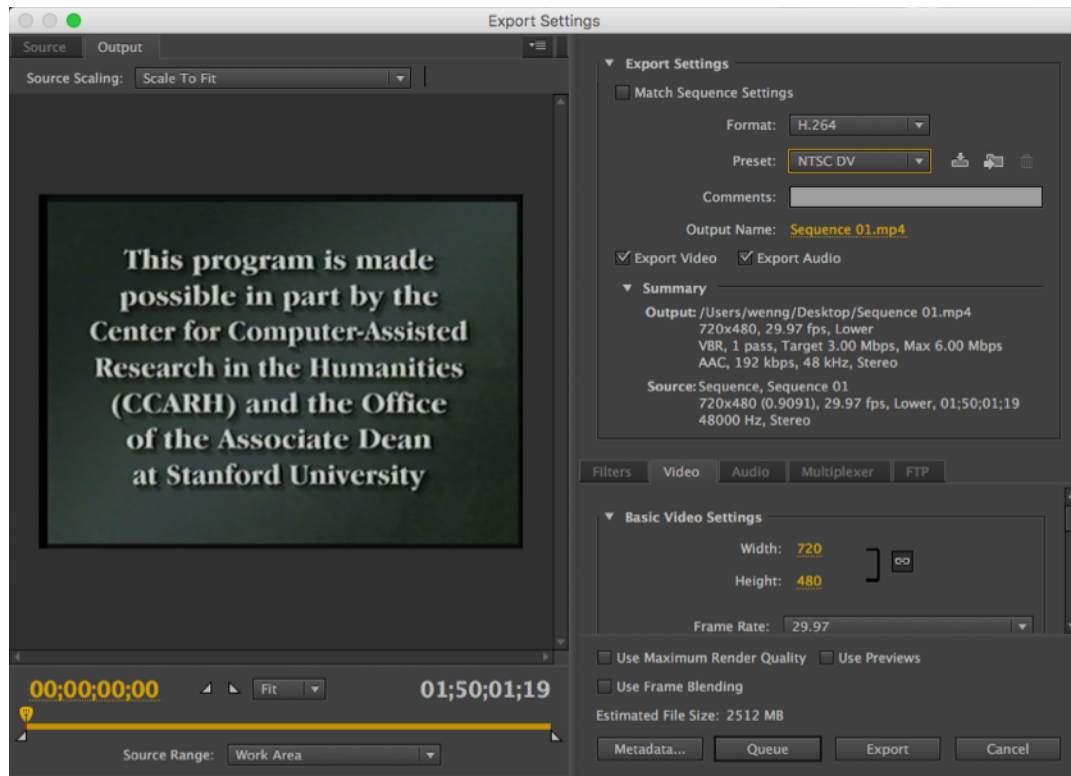


## 8. Choose H.264 for Export Settings for a reduced size but relatively good quality and universal mp4 format.



Use the default Preset at NTSC DV. Refrain from using a higher resolution for the video as digital video quality is limited by the original VHS quality, and doing so will increase derivative file size. All the other settings remain at default mode. Hit Export/Queue when done.

As our video quality is limited by the original VHS quality, our decision is to upload the mp4 format video to the IUScholarWorks, taking into consideration that Stanford will have the best master copy.



## Conversion of VHS to DVD

9. Play DVD (or VHS) through the DVD/VHS player. Make sure the MiniDV player is on; video played will be displayed on the MiniDV's screen. *\*VHS/DVD conversion can be operated simultaneously as Step 5 while digitizing analog material.*  
Remember to **finalize the DVD** in the same machine used to convert the DVD after finish-converting the VHS to DVD to ensure the DVD playback on other equipment!

More conversion instructions can be found in the Toshiba DVR620KU manual page 51.

Finalizing DVD instruction on the manual: page 66, 67 for Sony machine; page 32 for Toshiba machine.





## **Technical Details**

### Equipment used:

- Macbook Air
- iMac
- HP Workstation
- Sony HD Videocassette Recorder
- Sony Video Cassette Recorder/DVD Recorder
- Toshiba Video Cassette Recorder/DVD Recorder
- Samsung Bluray Player
- Sony DVD+R

### Software used:

- Adobe Premier Pro CC
- Handbrake 1.0.7
- VLC Media Player
- Windows Media Player

## Hofstadter's Collection Metadata Application Profile on IUScholarWorks

Element Name	Obligation	Vocabulary/ Encoding Scheme	Input Guidelines & Examples
id	NA		Assigned randomly by system
collection	NA		Assigned randomly by system
dc:title	Required		Name given to the resource.
dc.contributor.author	Required	LCNAF	A list (concatenated and separated) of names of people, groups, or organizations responsible for making contributions to the resource. Source refers to <a href="http://id.loc.gov/authorities/names.html">Library of Congress Name Authority File (http://id.loc.gov/authorities/names.html)</a> and look for the name matches with profile. Example, there is three records found for "Janet Peters" but only one of them associated with paleontology – "Peters, Janet, 1960-", that is the "Janet Peters that we are looking for. Use vertical bar " " in between values, example: "Peters, Janet, 1960-   Horowitz, Alan Stanley, 1930-". If no record is found in LCNAF, enter "?" in front of the name, enter name as in Last name, First Name, Middle Name, i.e. "?Schweers, Richard Henry".
dc.publisher	Required If Applicable	LCNAF	A list (concatenated and separated) of names of people, groups, or organizations responsible for making contributions to the resource. Source refers to <a href="http://id.loc.gov/authorities/names.html">Library of Congress Name Authority File (http://id.loc.gov/authorities/names.html)</a> and look for the name matches with profile. Example, there is three records found for "Janet Peters" but only one of them associated with paleontology – "Peters, Janet, 1960-", that is the "Janet Peters that we are looking for. Use vertical bar " " in between values, example: "Peters, Janet, 1960-   Horowitz, Alan Stanley, 1930-". If no record is found in LCNAF, enter "?" in front of the name, enter name as in Last name, First Name, Middle Name, i.e. "?Schweers, Richard Henry".
dc.subject.lcsh	Required	LCSH	The topic of the resource. Refer to LCSH. Search for broad subject under [LC Subject Headings] field at <a href="http://id.loc.gov/authorities/subjects.html">http://id.loc.gov/authorities/subjects.html</a> ). Be as narrow or specific as possible if it is available on the LCSH. Use vertical bar " " in between values, max six subjects. If more than six, choose any six that best represent the object.
dc.description	Required If Applicable		Free text form. Enter as provided.
dc.language.iso	Required	RFC5646	A language of the resource. Language source codes refer to RFC5646. English equivalent to "en". Refer to <a href="http://www.rfc-editor.org/rfc/rfc5646.txt">http://www.rfc-editor.org/rfc/rfc5646.txt</a> in Appendix.
dc.type	Required		The set of classes specified by the IU Scholarly Communications for digital resource. Possible values: Animation, Article, Book, Book Chapter, Dataset, Doctoral Dissertation, Learning Object, Image (2 - D or 3 -D), Map, Musical Score, Plan or Blueprint, Preprint, Presentation, Recording (acoustical, musical, or oral), Software, Technical Report, Thesis, Video, Working Paper, Other.



## **References:**

NISO A Framework of Guidance for Building Good Digital Collections  
<http://framework.niso.org/>

Specification for master files  
California Audiovisual Preservation Project (CAVPP) Target Audio and Video Specifications  
(redirected from archives.gov)  
<https://calpreservation.org/wp-content/uploads/2017/03/CAVPP-File-Specs-2017.03.08.pdf>

Remastering video files  
<http://www.replaydvd.co.uk/restoration.htm>